In the Specification:

Please amend the paragraph beginning on page 15, line 1 as follows:

It may be argued that despite the large splitting between the modes with adjacent values of index m (of the order of "large" FSR), one may still expect a dense spectrum resulting from the overlap of many mode families with different principal number l. In practice, however, it is exactly the coincidence in the frequency domain of WG modes with different main index l, and rapidly increasing difference l – m, that should be responsible for effective dephasing of the "idle" modes from the evanescent coupler, resulting in the reduction of modes in the observed spectrum. In addition to increasing phase mismatch for excitation of WG modes with complex "transverse" structure (l – m > 1), reduced amplitude of these modes may also be the result of their lower intrinsic quality-factor. With smaller unloaded Q, critical coupling for these modes would require closer position of the cavity to the excitation prism [[of]] or waveguide.

Please amend the paragraph beginning on page 16, line 11 as follows:

FIGS. 5A, 5B, and 5C show exemplary ~~opto-electornie~~ **opto-electronic** oscillators that use a spheroidal microcavity as an optical delay element. Compared to previously disclosed opto-electronic oscillators with microspheres operating in the microwave band (typical frequencies ~3-30GHz), the OEO based on micro-spheroidal (microtorus) resonator may operate robustly at much higher frequencies, corresponding to their mode spacing (FSR, free spectral range) in the submillimeter wave band (>300GHz) and further, in Terahertz frequency domain(>1000GHz). Such an OEO may include an electrically controllable optical modulator 532 and at least one active opto-electronic feedback loop that comprises an optical part and an electrical part interconnected by a photodetector. Although many commercial electro-optical modulators cannot operate beyond 100GHz, such an ultra-high frequency optical modulator may be constructed on the basis of spheroidal resonator formed of electro-optic material as described later in this application. ~~Modulator~~ **The modulator** for the OEO needs not be operated in **a** wide range of frequencies, therefore high efficiency can be achieved by using double microwave and optical resonance. The opto-electronic feedback loop receives the modulated optical output from the modulator 532 and converted it into an electrical signal 524 to control the modulator 532. The loop produces a desired delay

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and feeds the electrical signal in phase to the modulator 532 to generate and sustain both optical modulation and electrical oscillation in the RF range when the total loop gain of the active opto-electronic loop and any other additional feedback loops exceeds the total loss.

Please amend the paragraph beginning on page 21, line 17 as follows:

It is further contemplated that, the spheroidal cavity may be formed of a laser-active material with ~~action~~ **active** ions such as rare earth ions to operate as a miniature solid-state laser when a proper optical pumping scheme is provided. The laser active material can produce an optical gain at a laser emission wavelength by absorbing pump light at a pump wavelength longer than the laser emission wavelength. Because of the small volume and high Q of whispering-gallery modes, such a laser can combine very low threshold and narrow emission linewidth. For example, the angle-polished fiber coupler shown in FIG. 2A may be used to couple a pump beam into the spheroidal cavity and to couple the laser beam out of the cavity, both through evanescent fields of the whispering gallery modes.

Please amend the paragraph beginning on page 23, line 23 as

follows:

FIG. 6A depicts the embodiment of stabilized laser based on

optical feedback provided by intracavity backscattering effect.

The output of the laser 610 is evanescently coupled into the

cavity 100 as a wave 612 in a WG mode. The scattering of the

wave 612 produces a counter-propagating wave 614 in a WG mode.

The wave 614 is then coupled to control the frequency of the

laser 610. In FIG. 6B, a laser is formed by a closed optical

loop that includes a semiconductor optical amplifier chip 620

(in effect, a laser diode with its internal cavity totally

suppressed by antireflection coating), two passive waveguide or

fiber couplers 630 and 640, and a microspheroidal cavity 100.

The frequency of the laser is locked at a WG mode of the cavity

100.